

Amendment to the Claims:

This listing of claims will replace all versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method of wireless network communication comprising:
communicating over a plurality of carriers using an adaptive array antenna
between at least one network access point and a plurality of clients;
monitoring at least one dedicated carrier with an omni-directional antenna for new
clients seeking to associate with the network;
detecting a new client over the at least one dedicated carrier; and
associating the new client to the network
wherein the communicating using an adaptive array antenna and monitoring at
least one dedicated carrier with an omni-directional antenna occur concurrently.

2. (Previously Presented) The method of claim 1 wherein the step of communicating
over a plurality of carriers comprises communicating over orthogonal frequency division
multiplexing frequencies.

Claims 3 - 5 (Cancelled).

6. (Previously Presented) An implementation for network communication comprising:
at least one network access point for communicating with a plurality of clients
over a plurality of carriers;
means for monitoring at least one dedicated carrier selected from the plurality of
carriers for new clients seeking to associate with the network with an omni-directional antenna;
means for exchanging data with the plurality of clients with unselected carriers
from the plurality of carriers employing an adaptive array antenna;
means for detecting a new client over the at least one dedicated carrier; and

means for associating the new client to the network;
wherein the means for monitoring and the means for exchanging data operate concurrently.

7. (Previously Presented) The implementation of claim 6 wherein the plurality of carriers comprises orthogonal frequency division multiplexing frequencies.

Claims 8-18 (Cancelled)

19. (Currently Amended) An access point for operating on a plurality of frequencies, wherein at least one of the plurality of frequencies is a selected frequency and the remaining of the plurality of frequencies are unselected frequencies, comprising:

a first antenna;

a first transmit and receive circuitry for communicating with a client associated with the access point, the first transmit and first receive circuitry coupled to the first antenna array using the unselected frequencies;

a second antenna; and

a second transmit and receive circuitry for detecting a new client not associated with the access point, the second transmit circuitry and second receive circuitry coupled to the second antenna and using the selected frequency;

wherein the first transmit and receive circuitry operate concurrently with the second transmit and receive circuitry; and

wherein the access point is responsive to detecting the new client to exchange signals with the new client on the unselected frequencies via the second antenna to associate the new client.

20. (Previously Presented) The access point of claim 19, wherein the first antenna is an adaptive array antenna.

21. (Previously Presented) The access point of claim 19, wherein the second antenna is an omni-directional antenna.

22. (Previously Presented) The access point of claim 19, wherein the first antenna is an omni-directional antenna and the second antenna is an omni-directional antenna.

Claims 23 – 25 (Canceled)

26. (Previously Presented) The access point of claim 19, wherein the first antenna is an adaptive antenna array and forms at least one directional antenna.

27. (Previously Presented) The access point of claim 19, wherein the plurality of carriers comprises orthogonal frequency division multiplexing frequencies.

28. (Currently Amended) The method of claim 1, wherein the associating the new client to the network further comprises exchanging data with the new client on the ~~selected frequency~~ dedicated carrier to associate the new client.

29. (Currently Amended) The method of claim 1, wherein the associating the new client to the network further comprises ~~exchanges~~ exchanging data with the new client ~~using via the unselected frequencies via the plurality of carriers using the first~~ adaptive array antenna.

30. (Previously Presented) The method of claim 1, wherein the adaptive antenna array forms at least one directional antenna.

31. (New) An access point for operating on a plurality of frequencies, wherein at least one of the plurality of frequencies is a selected frequency and the remaining of the plurality of frequencies are unselected frequencies, comprising:

a first antenna;

a first transmit and receive circuitry for communicating with a client associated with the access point, the first transmit and first receive circuitry coupled to the first antenna array using the unselected frequencies;

a second antenna; and

a second transmit and receive circuitry for detecting a new client not associated with the access point, the second transmit circuitry and second receive circuitry coupled to the second antenna and using the selected frequency;

wherein the first transmit and receive circuitry operate concurrently with the second transmit and receive circuitry;

wherein the access point is responsive to detecting the new client to exchange signals with the new client on the selected frequency to associate the new client; and

wherein the access point exchanges signals with the clients associated with the access point using the unselected frequencies via the first antenna to associate the new client.

32. (New) The access point of claim 31, wherein the first antenna is an adaptive array antenna.

32. (New) The access point of claim 31, wherein the second antenna is an omni-directional antenna.

33. (New) The access point of claim 31, wherein the first antenna is an adaptive antenna array and forms at least one directional antenna.

34. (New) The access point of claim 31, wherein the plurality of carriers comprises orthogonal frequency division multiplexing frequencies.